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NOTES ON SOME OF THE MOST FREQUENT FORMS OF SKIN DISEASE.[1]

BY F. B. GREENOUGH, M. D.

NUMBER III.

Acne. — Inasmuch as probably no member of the human race passes the age of puberty without being more or less affected by it, acne may be said to be the most common of the cutaneous affections; that it does not always stand at the head of the list numerically in the physician's case book is due to several reasons. In the first place being so common, especially at a certain age, it is regarded by many as a necessary evil, which, unless it should become too aggravated, is not worth troubling one's self about. Again, as it is considered by the majority of people as an evidence of some impurity of the blood, the domestic practitioners feel themselves perfectly competent to treat it, and do so by prohibiting the use of butter, gravy, and other "greasy" viands, besides appealing to the emunctories with sulphur and molasses, salts and senna, etc. And lastly, there is a feeling that it is a disease against which, when domestic remedies have failed, the efforts of the physician will not prove very efficacious. This opinion is, I am afraid, not entirely groundless, as the disease is usually treated, since the means commonly employed are ferruginous tonics, or if the patient be a female and the physician consulted have a taste for gynæcology an attempt to find and correct some uterine disturbance is made, and the use of tar or carbolic soap is prescribed locally. The fact is, however, that acne is one of the skin diseases which is most amenable to treatment if the patient be willing and able to give the amount of time and trouble requisite in seeing the physician as often as is necessary, and in following out the instructions given. I do not mean to say that in a light case the occasional appearance of a pimple can be prevented, or that in a severe one the skin can ever be restored to its original softness and delicacy, but in the former the attacks may be made very much less frequent and their duration cut short, and in the latter the general condition and appearance of the skin may be very decidedly improved. In fact the more aggravated a case is, the more marked will be the improvement under appropriate treatment.

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[1] Continued from page 280.

Acne is so common and well known that it may seem superfluous to say anything with regard to description, diagnosis, etc., but as I am convinced that the really most important factor in the pathology of the disease is not sufficiently insisted upon by the authors, and as it seems to me that the appreciation of this point is absolutely necessary to understand and still more so properly to treat the disease, I will say a few words on the subject.

Acne, popularly known as "pimples" or "toddy-blossoms," is a papular eruption found most frequently on certain parts of the body which in point of liability to be subject to it stand in about the following order: forehead, cheeks, chin, shoulders, back, and breast. The history of each individual papule is as follows: a congestion of the cutis takes place about the opening of a sebaceous follicle, and a proliferation of the connective-tissue corpuscles and effusion of lymph follows, causing a conical raised papule, varying in size from that of a mustard seed to that of a good-sized pea. At the apex of this papule a small pustule is formed, more or less suppuration takes place, the pustule breaks, pus is discharged, and with it some broken-down sebaceous matter, and then the absorption of the lymph occurs and the spot disappears. What is the cause of this, or to what is it due? In every case to the fact of the contents of a sebaceous gland having become, as it were, a foreign body in the skin, and the process of getting rid of it being just the same that nature would resort to in case of a sliver or thorn, namely, inflammation, suppuration, and elimination. The sebaceous follicles under certain unknown influences become stopped up, and the sebaceous matter, instead of being evacuated as it is secreted and performing its function of lubricating the skin, is retained in the gland. When this collection of sebum fills and distends the duct and opening of the follicle as well as the gland itself, we find a little plug of a waxy nature filling the gland and showing on the epidermis as a round spot of a size from that of a point of a pin to at times nearly a line. These plugs are commonly known as "flesh-worms," "black-heads," "grubs," etc., but dermatology gives them the high-sounding title of comedones. Presenting as they do a surface of sebaceous matter to the air, they are very apt to catch any dust or dirt that may come in contact with them, hence their usual dark hue. The darkness of the color and even the color itself of these spots depend entirely on the external surroundings of the patient: thus on printers and people who work in a dusty atmosphere they will be found very black; mechanics who work in copper or brass will show these comedones of a bright-green tinge; while tailors and sewing girls who work on fabrics dyed with indigo will have a dark-blue color imparted to their occluded sebaceous follicles. Tar also seems to have a very marked effect in giving a black color to the comedones, and not only that, but to have a decided influence in causing the follicles to become plugged. On the other hand ladies who protect their faces with veils, and who are careful and frequent in their ablutions may have the follicles much distended without any black spots being noticeable. The hollow of the ear, just above and behind the meatus, is a favorite location for comedones, and in this situation they are apt to attain a very great size, but they never, as far as I know, act as an irritant in this locality. Sometimes the sebaceous gland retains its sebum without showing any evidence of it on the cutis, that is to say the mouth of the duct will not be distended and plugged up, but the retained sebaceous matter in the gland itself acts exactly like a comedo. It is to one of these two conditions of a sebaceous gland, or rather more properly speaking to one of these two varieties of the same condition, that is, retained sebaceous matter, that every papule of acne owes its being.

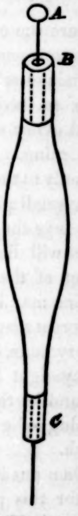
The process is exactly the same, on a smaller scale, as that which takes place in every furuncle, the only difference being that instead of a slough of the cutaneous tissue acting as an irritant, in acne it is the retained plug of sebum. As in the case of a furuncle, we may have, as it were, a false alarm, that is to say, in certain cases the raised congested papule instead of breaking down and suppurating is reabsorbed, but whenever the pathological process is completed, with the pus discharged, sebaceous matter will be found, and as soon as this has been thrown off the course of the papule is towards cure. This is the point which it seems to me is not made prominent enough in the books, as the majority of writers on the subject, instead of accepting this as the actual, immediate, and constant cause of acne, refer, in an incidental way, to the fact that the glands are occluded, and wander off into all manner of hypotheses as to the remote causes of the disease or of the glands becoming occluded and inflamed. To what an absurd extent this desire to find the remote causes of acne is carried cannot be better shown than by quoting Erasmus Wilson's paragraph on the subject: —

" *Cause.* Acne is essentially a disease of debility, and especially of nutritive debility. In one hundred cases we found only two that we could designate as dependent on assimilative debility, and one only on nervous debility. The remote predisposing causes made evident by these one hundred cases were as follows: rapid and over growth, twenty-five; congenital weakness, twelve; anæmia, eleven; deficient and improper diet, seven; errors of air, exercise, and general hygiene, six; and under five each the following: nervous debility, mental application and study, scarlatina, fever, deranged menstruation, eczematous diathesis, rubeola, dyspepsia, rheumatism, chill, syphilis, variola, vaccination, strumous diathesis, hæmorrhage, abcess, depressing climate, and climate of India."

Surely such knowledge is worse than ignorance, and it is much better to look upon the retention of sebum as the constant and immediate cause, admitting that beyond this fact our knowledge does not as yet extend. I do not mean to say that we should accept this limit to our information on the subject, and not endeavor to reach beyond it by all the means of investigation and research which can be brought to bear, but in order to establish the connection of cause and effect, something more than mere coincidence is needed, and that this is the only ground for the list of remote causes given above must, I think, be evident to any candid inquirer. That some other factor besides the retention of the contents of a follicle is necessary to produce acne is shown by the fact that in some patients we see the follicles much distended without any surrounding inflammation, while in others the face will be a mass of pimples and yet the mouths of the glands be scarcely visible. Still more to the point is the fact that on the same subject we may find comedones a line in diameter which are not causing any irritation, while alongside of them will be a large, inflamed, angry pimple, due to a retained plug of sebum so small as to be with difficulty distinguished. It seems to me that when we see this difference in liability to become inflamed in the different follicles of the same person, without any means of explaining it, we can hardly expect to appreciate certain constitutional differences as the cause why one person should be more liable to this same trouble than another. Two conditions of the system are pretty universally claimed as being predisposing causes to acne, namely, anæmia and disturbance of the digestive function. Certainly many of the subjects of acne are chlorotic and ill nourished, but on the other hand the most robust and healthy are not exempted from the disease. Troubles of digestion are not at all unfrequent, and when they are found of course should receive appropriate treatment whether the patient has acne or not. It would be an omission not to refer to disturbances of the sexual organs or function as a popularly accepted and possibly real predisposing cause of acne. The fact of its being much more prevalent at the age when this function begins to become active has established an idea of connection between the two. I have also found that a large majority of the young women who seek treatment for this eruption, when asked if they have observed that it is aggravated at any particular period, will reply that is generally worse at the time of the menstrual sickness; many of them also complain of some catamenial irregularity. There is no doubt that many of the girls who have been much disfigured by acne recover the smoothness and freshness of their skin after entering the married state and becoming mothers. It must be remembered, however, that patients of this class are almost without exception anæmic and sickly, and that it is perfectly possible that the sexual disturbances and acne, instead of standing in the relation of cause and effect, may both be due to a common cause, that is, a low condition of the system. Practically, as far as treatment goes, it is to this general condition, and not to the special manifestations of it, that we must look for indications. It is certainly important that an anæmic, nervous, hysterical girl should not have her attention directed by every pimple to her womb, as that organ probably already occupies altogether too much of her thoughts. The sebaceous follicles being most frequently found occluded in certain parts of the body, it follows that acne most commonly occurs in the same regions, but it may be developed anywhere that sebaceous glands exist. I have seen a case in which on the face, body, and limbs literally not a single area of a square inch could be picked out in which there was not a pimple in some stage of development or the evidence of one having recently been there. The patient had been a fireman in the hold of a steamer, where the temperature was very high and he worked almost naked. Such cases are, however, exceptional, and as a rule the eruption is confined to the face, neck, and upper part of the thorax. It is most frequent about the age of puberty, rarely being found to any great extent after thirty-five. In a mild case a few papules will be seen on the forehead and cheeks, in different stages of development. Each one of these runs its course: as soon as suppuration has taken place and the sebum has been evacuated, the papule disappears, leaving behind it a little pit, which is permanent if the suppuration was extensive enough to destroy the gland. Meanwhile other papules may have come into existence. In a severer form of the disease we find many more follicles affected at the same time, some of which being near together coalesce and form a large tubercular-looking indurated mass. In these tubercles quite good-sized abscesses may form, the skin from constant inflammation becomes thickened and infiltrated, the abscesses when emptied leave ugly scars, and the patient is very much disfigured. Between the two extremes of a pimple or two and a case such as described, every grade of severity may exist, but the individual history of each single papule is in every case the same. In spite of this fact the writers on the subject have not been able to abstain from what I look upon as the curse of cutaneous literature, the tendency to classify, divide, and subdivide, and we find acne vulgaris, coniformis, punctata, pustulosa, indurata, etc., described as though they were different varieties of the disease, instead of being simply different stages or developments of the same process, all of which may be, and generally are, found in the same case.

At or shortly after the age of puberty the hair follicles of the leg, especially on the anterior and outer aspect of the thigh, and on the posterior and outer aspect of the calf, are apt to become plugged up with sebum, acne pilaris. I have, in a few cases of young men, noticed that when these plugs were squeezed out, a hair, half an inch or more in length, would be found to be curled up in the sebaceous matter, its root, however, being attached to the follicle. I suppose this to be due to the fact of the follicle's being filled by the secretion of its sebaceous gland before the body hairs are developed, and under the circumstances when the hair does begin to form at the bottom of the follicle, not being able to get out, it curls itself up as it develops in the sebaceous matter. This is merely a theoretical explanation of a fact which is referred to only because I have never seen any mention of it. After the hairs are once developed the follicles are not subject to acne; in the same way it is never found on the scalp, the so-called acne capitis being a pustular eruption due to the poison of the syphilitic veins in the system, and in no sense a true acne. The internal administration of the iodide of potassium will in certain subjects call forth an eruption which looks like acne, as will also, but to a less degree, the bromide. That this is a true acne I have not been able to convince myself, — that is to say, an effort of nature to throw out a retained plug of sebum, — but on the other hand I am unable to say that it is not. When due to this cause the eruption of several papules appears simultaneously, pretty widely scattered over the thorax and face; they are all about the same size, and are, I think, of a rather brighter red color than those of common acne. When the exhibition of the drug is suspended they disappear. With regard to the diagnosis of acne little need be said, if its true character be kept in mind, namely, that it is an effort of nature to get rid of an offending body, and that that being accomplished it comes to an end. It should, however, be remembered that the presence of this offending body is not always evident on inspection. Where the duct and mouth of the gland are not distended, we can make sure of the presence of the exciting cause only by cutting open the papule and then squeezing it between the thumb nails, and sometimes even then considerable force will be needed. I have had the little round mass of sebum pop out with force enough to hit me in the face when squeezing a pimple on a patient.

But even without this pathological guide acne is not apt to be confounded with any other eruption. There is a form of papular eruption of the forehead which is a manifestation of syphilis, which might perhaps at times cause some hesitation in the diagnosis. But apart from the other symptoms the eruption in this case would be found elsewhere on the body, and if there were any suppuration the crust, scabs, etc., would be much larger and different in every way from those of acne. The possibility of confounding acne with one of the variolous eruptions need only be thought of to be avoided. From what has been said it will be readily seen that the treatment should be preventive as well as curative. The retention of sebum in a gland being always the actual cause of acne, if we could always prevent this taking place we should not have any acne. Where comedones exist we have an evidence of the sebum being retained in the follicle. These spots are of themselves often a source of annoyance and disfigurement. They may be removed by squeezing them out with the thumb nails, but a neater and easier way is to use an instrument for the purpose. A watch key does very well; the cheap universal key that is, or was, sold about the streets, made of several barrels of different calibres projecting from a centre like the spokes of a wheel, is the best, as we can select one which is of the proper size for the comedo which we wish to remove. It is placed perpendicularly over the comedo and pressed down with some force, and the plug pops up into the hollow of the tube. This does very well for occasional use, but in time the keys get clogged up with sebaceous matter; moreover, the hollow is square instead of round, and the edges being quite sharp the pressing down of the instrument with the amount of force necessary to extract the plug will sometimes cause more pain than the patients, especially if they are ladies, care to bear. To obviate these slight objections I have had Messrs. Leach and Greene make me a little instrument for extracting comedones, which is very handy and useful. Each end has an opening, one being a sixteenth and the other a thirty-second of an inch in diameter, and the flat metallic edge round the opening being of the same thickness as the diameter of the opening. The two ends are connected by a hole through the handle, so that by means of a small stylet the cavity can be kept clean and free from old comedones. The breadth of the edges, a sixteenth and a thirty-second of an inch, is sufficient to prevent its cutting as a watch key does, and the appearance of the little instrument is neater and more ship-shape than an old watch key. Where there are more comedones than can be removed one by one, much benefit can be obtained by the use of the German soap. This should be used every night on a piece of sponge or flannel, giving the parts affected a good scrubbing, and taking care to wash the soap off with several clean waters. After this has been done thoroughly every night for a week or so, the skin will begin to look red and shiny, if not somewhat rough in places, and then the soap should be used only every other day or twice a week. A lotion of glycerine, alcohol, and rose-water applied after the washing seems to soothe and soften the skin, and after removing the comedones I have been in the habit, on theoretical grounds, of adding a little tannin to this wash. In the German soap we have a very valuable agent for preventing the follicles from becoming occluded, and even for emptying them when



A Stylet.
B Large end 1/16 in.
C Small end 1/32 in.

they are in that condition, but as soon as a follicle shows an inflammatory tendency something further must be done. The inflammation being an evidence of a desire to get rid of the retained sebum, if we can do that we ought to be able to abort or cut short the life of the papule, and such is the case. If the moment a papule of acne shows itself we prick it with some sharp instrument, such as a cataract needle, and then squeeze out the sebaceous matter, the papule will be reabsorbed, and its life will be three or four days instead of ten days or a fortnight. In some cases, however, the pimples may be aborted without cutting them, and for this purpose several mixtures are used as counter-irritants, most of them containing sulphur. Of the various preparations the following is as good an example as any: —

℞ Flor. sulphuris,
Potass. carbonat.,
Glycerinæ,
Spts. camphoræ, vel spts. vini Gallici . . . āā p. æq. (by weight.) M.

Where the comedo can be seen at the apex of the pimple it is well always to squeeze it; but little force will be required; when, however, the retained sebum is in the inner part of the follicle, and the patient objects to having quite a cut made, one of the acne mixtures may be applied every night to the eruption, left on all night, and washed off in the morning. It should not be smeared on the skin generally, but applied only to the pimples themselves, and this is best done by a tooth-pick or any small piece of wood. If the use of the mixture be successful, in a few days the pimple will become dry and desquamate, and the inflammation will disappear. These mixtures seem also to hasten the reabsorption of the pimples after the sebum has been discharged. Tincture of iodine may be used as a counter-irritant. In some cases where there are a great many comedones tincture of iodine may be painted on as often as every hour, only one coat at a time, however, so as to avoid vesication; in forty-eight hours there will be a dry, brown skin formed over the part, and by the next day this can be readily peeled off, taking with it the plug of every follicle and leaving the skin underneath white and smooth.

When pus is present in the hard infiltrations it should be evacuated, and for this purpose a sharp, thin knife is the best; the triangular cataract knife is well adapted for this purpose, as it is also for opening the pimples. Where there is much induration and thickening of the skin very great benefit may be obtained by the use of mercurial ointment as a plaster spread on a bit of kid or linen and kept on the spot, the absorption of which we wish to hasten, as much of the time as is possible. It should be renewed once or twice a day, and the skin washed with warm water and German soap. By this method of treatment the quickness with which the thickened and discolored skin regains its normal condition is sometimes astonishing, and it will be found that large tubercles which looked as though they would certainly break down and cause abscesses will be entirely reabsorbed. The indications which we endeavor to fulfill by means of local treatment may be briefly recapitulated as follows: to keep the sebaceous follicles active and open, and to prevent their becoming occluded; should we not be successful in this, to empty them before inflammation is set up; if this has, however, already taken place, to shorten the duration of the papule by means of counter-irritation or by evacuating the offending sebaceous matter; and, lastly, to hasten the reabsorption of the inflammatory products.

It is evident that much time and trouble are required to carry out this treatment thoroughly, as every follicle is looked upon as a possible source of trouble, and each pimple is treated as an individual according to the stage of its development. Nevertheless, even in dispensary practice, where much time cannot be given to each patient, very good results are obtained when the subjects have intelligence enough to understand and follow the indications of treatment. As acne is universally looked upon as an evidence of "poor blood," the vast majority of patients will not be satisfied with local treatment alone. In many cases the indications for some constitutional treatment will be very plain: many of the patients will be flabby, anæmic, and ill nourished, and will improve decidedly under the use of tonics; others will have some disturbance of the digestive function, which will call for advice as to diet and hygiene, if not for drugs, but in a certain number of cases the physician, if candid, must admit that any internal treatment prescribed is simply given as a placebo.

I suppose that some members of the profession would refuse to give any internal treatment under the circumstances, but it seems to me that, considering the value of faith as a therapeutical agent, in certain cases a placebo is as much indicated as quinine in intermittent fever. I am aware that this is ticklish ground, but between giving an inert remedy and claiming benefit from it, and obstinately insisting that the trouble is entirely local and that no internal treatment can possibly have any effect, there surely is a middle course, the determining of which can be safely left to any one who has a proper idea of his own dignity and that of the profession.

(To be continued.)

RECENT PROGRESS IN PATHOLOGY AND PATHOLOGICAL ANATOMY.[1]

BY R. H. FITZ, M. D.

PATHOLOGICAL ANATOMY.

Bone Marrow in Pernicious Anæmia. — In a letter to Virchow, Cohnheim[2] speaks of a change observed by him in the bone marrow in a case of pernicious anæmia. He desires to call the attention of other observers to the alteration, as he has been unable to find any mention of a similar condition, and it seems desirable to ascertain whether the appearance is an accidental or a constant feature in this affection.

The patient was a male adult, under Biermer's care, and presented the typical features of this disease. The gradual onset without evident cause, the waxy, eventually yellowish skin, the retinal hæmorrhage, the frequent, soft, finally bounding pulse, and the cardiac and vascular murmurs were characteristic. The patient, as usual, complained of short breath, great feebleness, and debility.

At the autopsy the usual appearances were found. Pallor of all the organs, multiple, punctate hæmorrhages in the brain, retina, pericardium and endocardium, renal pelves, bladder, and mediastina. The heart was in a state of fatty degeneration, there was dense hyperplasia of the spleen, a large fatty liver, and the lungs were œdematous.

The marrow of all the bones, vertebræ, ribs, sternum, and cylindrical bones was very red, but without evident hæmorrhage. The microscope showed an almost entire disappearance of the fat cells of the marrow. Instead there were found colorless cells of various sizes, single multinucleated giant cells, and a few cells containing red blood corpuscles. Almost an equal number of red cells were found. Of these the ordinary biconcave disks were in the minority, while globular, red, non-nucleated corpuscles were more noticeable. These varied in size from the diameter of a normal blood corpuscle to twice that of a white corpuscle. Still more abundant were red nucleated cells, varying in size, though most of them were equal in this respect to the smaller epithelioid marrow cells. The nuclei were colored like the cells.

The blood had been repeatedly examined till within a few weeks of death, but no nucleated red blood corpuscles had been found. They were present, though not in large quantities, in the blood removed after death from the body veins. The spleen and liver contained them also. Apart from the anæmias resulting from single or repeated losses of blood and from those due to feeble nutrition, including the consumption of nutriment in excessive secretion or in the production of large tumors, there is a special anæmia developing irrespective of the previous conditions and dependent upon a primary disease of the blood-making organs. Characteristic of the progressive pernicious anæmia is the preferable or exclusive affection of the red blood corpuscles. It may be considered as representing a primary disease of those parts of the blood-forming organs which are concerned physiologically with the production of the ed blood corpuscles.

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[1] Concluded from page 410.

[2] Virchow's Archiv, 1876, lxviii. 291.

Cysts in Bone. — Virchow[1] describes the appearance of a humerus containing a cyst, removed from a woman fifty-six years of age, who died of multiple metastatic giant-cell sarcoma after the removal of the primary tumor, which was seated in 'the neck. The cyst was bottle-shaped, thirty-seven m. m. long and sixteen m. m. across at its widest part, and was seated in the shaft of the bone just below the epiphyseal line. The contents which escaped on sawing the bone were fluid. Its wall was smooth though irregular, presenting numerous projections and depressions, nowhere covered with epithelium, but bearing a gelatinous layer in which were no cells. This was composed of firm, somewhat parallel fibres, very suggestive of fibro-cartilage.

The wall proper was 0.5 to 0.8 m. m. thick, of a cartilaginous structure, and either bordered directly upon the marrow or was united with bone or projections of fibro-cartilage. The largest of the latter could be followed forty m. m. from the lower end of the cyst through the long axis of the bone. A group of minute nodules of fibro-cartilage were found at the side of the cyst near the epiphysis, but in the midst of yellow marrow. These appearances persuaded Virchow that the cyst itself was to be regarded as the result of a new formation, and its contents the product of the softening of cartilaginous nodules.

In speaking further of the so-called cystic formations in bone, he states that these are never to be regarded as independent growths, the primary and essential condition, but as products of the conversion of formerly solid new formations. It is probable that these primary new formations are always within the typical forms of tissue from which bone is developed, and they vary, therefore, mainly between the cartilaginous and giant-cell sarcomatous forms.

Metastatic Goitre. — Cohnheim[2] gives the results of the post-mortem examination of a case where he found in various organs multiple tumors, resembling in appearance and structure the colloid or gelatinous forms of bronchocele, or goitre. The tumors were found in the lungs, bronchial glands, spine, and femur. During life a pelvic abscess had been opened, and peculiar gelatinous granulations had been scraped from its base; these also presented a structure similar to that of the thyroid body.

[1] Monatsbericht der königlichen Academie der Wissenschaften zu Berlin, 1876, 369. Centralblatt für die medicinischen Wissenschaften, 1876, xlvii, 839.

[2] Virchow's Archiv, 1876, lxviii 547.

The gross appearances of these growths and their multiplicity suggested the existence of a primary gelatinous cancer, but a most thorough examination revealed no appearances indicative of a primary growth, and the microscopical appearances were thoroughly such as are presented by the diseased thyroid. In the thyroid body three nodules of the same gelatinous structure and appearance were found. The structure of all these growths was such as exists only in the goitre, and could not be regarded as cancerous, yet the malignity was as decided as in the most typical sarcomas and cancers. The fact that tumors of identical structure are benignant in most people, yet may undergo metastases in others, indicates that the essential conditions for the latter are not confined to the nature of the tumor, but are to be found in its external relations, its growth into lymph and blood vessels, and above all in the composition, the constitution of the affected individual.

Cohnheim does not consider this observation as the only one of a malignant goitre, but thinks the case of tumor of the atlas and axis reported by Runge as of the same character, although the specimen was examined by Recklinghausen and considered to be a cancer.

The interpretation of the latter case is different. Although the structure of the tumor resembled that of beginning colloid degeneration of the thyroid body, and this organ was goitrous, yet the tumor of the spine was regarded as a primary cancer. For those who consider that a primary cancer must arise from parts containing epithelium the value of this observation and of the hypothesis is evident.

Chronic Pneumonia and Pulmonary Consumption. — By a study of the pathological changes in the respiratory apparatus following the section of the recurrent laryngeal nerves in animals, Friedländer[1] thought he might be able to obtain some light with reference to the chronic pulmonary inflammation of the human species.

The experiments were made upon rabbits, the result of the operation being a paralysis of the laryngeal muscles. Although an immediate constriction of the glottis took place, this lasted but a short time when it became impossible for it to be closed. A direct cause for inflammation of the lungs was thus obtained by the inhalation of foreign bodies, such as food, saliva, etc. During the first few days after the operation an inflammation of the trachea and bronchi was present, and in the majority of the cases this became extended into the parenchyma of the lungs often involving a large part of the same. After two or three weeks there was in most cases no evidence of inflammation of the larger air passages, and the extent of the pulmonary inflammation was decidedly diminished.

The fact that in paralysis of both vocal cords in man and dogs there is usually no pnuemonia is explained on the ground that compensatory measures are taken very early to prevent the entrance of foreign bodies into the air passages, and the lung tissue is not so delicate and easily irritated as in rabbits.

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[1] Virchow's Archiv, 1876, lxviii. 325

The inflammatory changes in the lungs are at the outset hyperæmia and œdema from engorgement, which either disappear or are followed by red hepatization. If resolution does not then take place, either a desquamative, transparent, gray hepatization occurs, or a small-cell, grayish-white hepatization results. The desquamative hepatization begins gradually within the first two weeks, and may end later in resolution or in atelectasis, remaining for months in this condition, but it does not become cheesy. The small-cell, grayish-white hepatization begins within ten hours and becomes extended within a few days. It is capable of resolution, but when intense it terminates regularly in cheesy degeneration, except in the rare event of actual suppuration. The desquamative forms and the small-cell form may occur side by side.

Although admitting the value of Buhl's theory regarding desquamative pneumonia, its relation to phthisis in the human species, and its very frequent termination in cheesy degeneration, the author does not agree that it is only the desquamative pneumonia which becomes cheesy. This opposition is not based upon the experiments, for although the desquamative pneumonia did not become cheesy, yet the inoculation experiments show that a desquamative pneumonia which does become cheesy may be produced in rabbits. The small-cell catarrhal pneumonia of children shows a transition into cheesy pneumonia differing from the cheesy degeneration in desquamative pneumonia as being much more diffuse, and involving the entire alveolar contents, walls, and groups of alveoli. The cheesy degeneration of desquamative pneumonia is limited rather to the centre of the alveolar contents, thence progressing slowly outwards.

The two different results are most probably dependent upon the greater disturbance to the circulation from the impaction of the alveoli with the small, round cells in catarrhal hepatization, favored by an enfeebled action of the heart or a diminished arterial calibre.

It was found in the experiments that, as the desquamative pneumonia replaced the red hepatization, an intervening state of abundant small-cell infiltration was present. This observation suggests that in the cheesy pneumonia of man following immediately upon an acute pneumonia with bloody sputa, it is possible that the desquamative pneumonia may proceed from a croupous pneumonia. Another important fact elicited from the experiments is that the small-cell hepatization may be produced within a few hours, while days and weeks are necessary for the alveoli to become completely filled with desquamated cells.

The experiments showed further a constant growth of the interstitial tissue, to the importance of which Buhl has called attention in connection with the origin of cheesy pneumonia in man. A granulation-tissue was produced much more abundantly about the vessels, particularly the arteries, than about the bronchi. A certain degree of obstruction to the arterial current was thus produced, but much greater obstruction was caused by the obliterating endarteritis which was found to begin even on the second day. This obliterating process, united with the increased rigidity of the arterial walls from infiltration, evidently interferes with the nutrition of the parts supplied by the artery and thus favors caseation.

In the later stages of the desquamative pneumonia epithelial clusters and pouches were found quite regularly within and around the bronchial wall. A connection between the epithelium of the surface and this new growth could only rarely be established with certainty.

A similar epithelial growth was found in the human lung in connection with chronic interstitial processes, especially in the smaller bronchi of children who had chronic interstitial pneumonia. This growth is in no way typical; moreover it is not limited to the lung, but is of general occurrence where epithelium is in direct relation with luxuriant granulation tissue, the new-found epithelium often differing widely from the normal formation. This observation is of particular importance as necessitating caution in the consideration of cancer from the histological point of view.

Fungus of the Navel.— Küstner[1] states that he has found upon the navels of children tumors of a glandular character hitherto included under the term fungus. Having examined ten such fungi he found seven to be composed of simple granulation tissue, one of the same general structure but partially covered with young epidermis, while two were tumors containing glands, adenomata. They were of the size of a pea, and were supplied by an artery of some size. The surface was covered with cylindrical epithelium; on section the glands were apparent as radiating lines extending inwards for a short distance from the periphery. The glands were tubular, lined with cylindrical epithelium, and were imbedded in a delicate tissue composed of round and spindle cells. The centre of the tumor was composed of smooth, muscular fibre.

Attention is called to the fact that the surface of the tumor was like that of the large intestine, and it is considered most probable that the tumor owes its origin to a persistence of the omphalo-mesenteric duct, which, though usually found as an intestinal diverticulum from the lower part of the ileum, has been seen by Ahlfeld to extend from the umbilicus to the mesentery.

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[1] Virchow's Archiv, 1877, lxix. 286.

It was at first thought that this tumor must have arisen from the allantois, the remains of which have been found in the umbilical cord by Sabine and others. Opposed to this view was the fact of a single epithelial layer, while the parts connected developmentally with the remains of the allantois, the lower part of the urachus, the bladder, and ureters have several layers of epithelium. The presence of the glands in the tumor is another objection to its origin from the urachus.

The adenoma has the muscular and glandular layers and the epithelial surface like the intestine, and thus differs in structure from the common umbilical fungus, the granuloma. It is thought likely to differ clinically in being of slower growth and in being less inclined to heal after the application of lunar caustic.

Phthisis of the Testis. — A good deal of confusion exists among writers in the use of the term "tuberculosis of the testis," it being evident that the term has been applied to appearances resulting from different processes and leading to entirely different results. Gaule[1] has examined histologically a larger number of testes removed during life or obtained at post-mortem examinations. The various changes found by him were a degeneration of the epithelium from inflammation, and tubular and peritubular inflammatory thickening of the walls of the tubules and of the tissue immediately surrounding them. Peritubular changes are closely allied to the interstitial ones due to inflammation of the substance of the testis lying between the tubules. His attention was more particularly attracted to certain fibrous nodules of the size of a pin-head or a pea, with a cheesy centre, generally spoken of as tubercles. These nodules were composed of seminal tubes with thickened walls, and of fibres running concentrically around them singly and collectively. The nodules contained also the results of cheesy degeneration. The tuberculoid nodules were thus essentially due to inflammation of the seminal tubules and the tissue immediately surrounding them, perispermatophoritis.

The structure of these nodules as well as their gross appearance resembles that of tubercles, particularly on cross-section. The tubercle, however, is a new formation lying between the tubules. Even the giant cells, so frequent a constituent of the tubercle, were exactly imitated by the epithelial lining of the tubules and the viscid cementing substance between the cells, the latter after hardening assuming a stellate appearance.

These various changes in the testis are apparently usually dependent upon similar processes, more or less advanced, and with varying degrees of degeneration. They are also combined with tuberculosis in other organs. Thus nodules resembling tubercles in structure, manner of distribution and degeneration, and associated with tubercles in other organs are yet different, arising in a different manner and in a different part of the organ.

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[1] Virchow's Archiv, 1877, lxix. 64 and 213.

These peritubular nodules are considered as analogous to the peribronchitic growths in phthisis of the lungs, and as in the latter there are various conditions, catarrhal bronchitis, thickening of the bronchial walls, induration, cheesy and ulcerative changes, so in the testis there are manifold conditions present.

The term "phthisis of the testis" should thus be applied to these alterations to distinguish them from tuberculosis of the testis, which Gaule did not meet with, but which demands the presence of tubercles.

BOSTON CITY HOSPITAL SOCIETY FOR MEDICAL IMPROVEMENT.

[REPORTED BY W. D. ROBERTSON.]

THE first meeting of the Boston City Hospital Society for Medical Improvement was held at the City Hospital on February 22d. The president, Dr. D. W. Cheever, made the opening address. The society consists of the visiting physicians and surgeons of the City Hospital, the superintendent, the present house officers, and such past graduates of the hospital as may from time to time be elected. The society is founded by and for the benefit of the house officers. It is the purpose of the members to discuss medical and surgical cases, particularly those occurring in the hospital service. Two of the house officers present at each meeting a paper which is freely discussed by their fellows, after which the staff criticise the cases and relate similar ones coming within their own observation. The object of the discussions is to resolve the latest methods of treatment into their most practical applications, and to afford the house officers both the benefit of the studies of their fellows in other departments than their own and the riper experience of the staff, who have evinced a hearty interest in the life of the new society.

At the first meeting a case of strangulated hernia, operated upon successfully by Dr. Cheever after a strangulation of forty-eight hours, was reported by Mr. C. A. Wheaton. The interesting features of this case were the very high point of strangulation, the neck of the sac being bound down by adhesions to the anterior abdominal wall, within the abdominal cavity at a point below the ring; the exhausted condition of the patient before entrance to the hospital for operation; the entire cessation of natural respiration for a period of eight minutes during the administration of ether, Sylvester's method for artificial respiration being employed, and after the operation the rapid and unbroken recovery of the patient.

The meetings of the society are held every other Thursday. At the last meeting, March 8th, a case of acute rheumatism running into the chronic form was reported by Mr. J. B. Foley, in the service of Dr. J. G. Blake, which, after resisting the faithful administration of salicylic acid, the alkalies, opium, blisters, and liniments, yielded on the exhibition of vinum colchici radicis. Although the case took a much longer course than that usually observed with various other drugs, or even without any medication at all, the proof of the value of the wine of colchicum in this case was established by an exacerbation of the symptoms upon its omission and their prompt alleviation upon a return to its use. The many methods of treating acute rheumatism were brought up, and fear was expressed by Dr. Boardman that salicylic acid might after a time prove less efficacious than its enthusiastic advocates now claimed. Dr. Ingalls gave some very interesting accounts of the earlier treatment of this disease in Boston and the furore over various *pro tempore* specifics.

Two cases of refracture of the femur for vicious union were reported by Mr. J. C. Cutter, in the service of Dr. W. C. B. Fifield. The first was a child three and a half years old, solid union taking place after refracture in nine weeks, with but half an inch shortening and a straight limb. The second case was a sailor twenty-six years old, with two and a half inches shortening and great lateral deformity, the result of vicious union after a fall. The limb was refractured by manual force under ether, perfect union resulting in eighty-five days, with but three fourths of an inch shortening, which Hamilton in his work On Fractures and Dislocations, quoting Drs. Bigelow and Warren, of this city, and many other surgeons, declares to be the average, if not better than the average shortening in well-treated simple fractures of the femur.

Refractures are hardly mentioned in the common text-books on surgery, even Holmes giving them but a short notice, saying, however, that refracture where there is vicious union may be safely and wisely done within a year of the first fracture, and the liability is so slight of fracturing any part of the bone outside of the new osseous formation that it need not be considered.

This was accidentally exemplified by a recent case under the care of Mr. Cutter, in the service of Dr. Thorndike, when a patient sixty-two years old, with a simple fracture of the femur, where perfect union took place after seven weeks' treatment, was allowed to walk upon crutches in a silicate of soda dressing, and, falling, produced a refracture at the recent point of union instead of some intracapsular injury, as an impaction of the neck of the thigh bone, which might have been anticipated from such severe and direct violence upon the trochanter major, especially in so old a subject. When admitted to the hospital, one week after the injury, the lower fragment was found overriding the upper one about two inches. The deformity was reduced by extension in bed with fourteen pounds' weight in about eighteen hours. The most extensive writers on refracture are Mr. Skey and Mr. Oesterlen. Mr. Butcher's celebrated case of refracture, reported by him to the *Dublin Journal of Medical Science* for November, 1876, was presented by Dr. Fifield.

The present officers of the society are: Dr. D. W. Cheever, president; Dr. E. Cowles, superintendent, vice-president; Dr. George W. Gay, vice-president; Dr. O. W. Doe, vice-president; Dr. F. W. Draper, vice-president; J. Clarence Cutter, treasurer; O. H. Marion, secretary.

SCHÄFER'S HISTOLOGY.[1]

Our first impression at the appearance of another English histology is one of surprise, for it would seem that the field must be pretty well occupied already. Without counting translations we have, besides the works of Carpenter and Beale, the following modern ones: Klein's treatise in the Handbook of the Physiological Laboratory, Rutherford's, which has reached a second edition, and Foster's combined Physiology and Histology. Certainly, at first sight, a new work appears superfluous. Must every school, we ask, have its own histology? This opens a line of inquiry that we cannot now pursue; but let us say at once that though we doubt not the *esprit de corps*, which is strong among the medical schools of Great Britain, may have its share in the production of this work, it has decided individual characteristics and merits. It is not merely an old friend with a new title-page, but a clear, practical guide to the student of histology, written by one who thoroughly understands not only his subject, but how to teach it. We are very much pleased with the book, which teaches the student simply how to use his instruments and conduct his studies without going further into the microscopic anatomy of the tissues and organs than is absolutely necessary; which is not far. The microscope is briefly described in the light of a tool, and we are spared a chapter on optics. The use of reagents, such as hardening and staining fluids, is treated in rather a desultory manner, each process being described with the preparation of a tissue to which it is particularly adapted; it would, we think, be more convenient if the methods, or at least the greater part of them, were put together.

As an example of the book, let us take muscular tissue, a difficult and interesting branch, and moreover the one in which our author has made important discoveries which first brought him into general notice as a histologist: (1) involuntary muscular fibre is shown as taken from the intestine, macerated in bichromate of potash and stained with logwood; (2) the same stained with nitrate of silver; (3) voluntary muscular fibre from a mammal, picked to pieces in serum; (4) a similar preparation in acidulated water to show the nuclei; (5) the same from a frog; (6) the same in salt solution to show the sarcolemma; (7 and 8) bits of muscular fibre macerated in solutions of hydrochloric and chromic acid to show the cleavage into discs and fibrillæ respectively; (9) maceration in a solution of sulphurous acid to isolate fibres and permit of comparisons between those from different muscles; (10) living muscular fibre from the large water-beetle or from insects; (11) a method of acting on muscle by gas to make it contract at will; (12) polarized light; (13) preparation of transverse sections of hardened muscle; (14) the same of frozen muscle; (15 and 16) methods of studying the termination of muscle in tendon. The modus operandi is given in detail in each case. The termination of the nerves in muscle is left to another section.

There is no mention of the difference between red and white muscles in the leg of the rabbit, first described by Ranvier, and the contraction of living muscle can be studied under more normal conditions in the leg of a small water-beetle, the gyrinus, for instance, than by any of the methods given by our author. Nothing is said of the terminations of nerves in the conjunctiva, though good observations by Longworth and others have lately been published on them. Other omissions might be found, but the book is none the less an excellent one. What we particularly praise in it is the way in which it takes the student by the hand, as it were, showing him what to do and explaining simply but thoroughly how to do it. T. D.

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[1] *A Course of Practical Histology.* By Albert Edward Schäfer, Assistant Professor of Physiology at University College, London. Philadelphia: Henry C. Lea. 1877.

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THE CORONER BILL.

The judicial committee has reported a bill for the abolition of the office of coroner and to provide for proper proceedings in cases of suspicious deaths. The first section reads as follows: "The offices of coroner and special coroner are hereby abolished." If this were all it would be an immense improvement on the present condition. The bill contains twenty-five sections, and provides for the appointment, by the governor and council, of two medical examiners to take the places of coroners and special coroners in Suffolk County, and of as many in the other counties as there shall be districts made by county commissioners; that the examiners of Suffolk County shall receive each a salary of three thousand dollars, to be paid quarterly; and the examiners of other counties shall be paid four dollars for a view, thirty dollars for a view and autopsy, and travel at five cents a mile to and from the place of view. The office is of special importance in Suffolk County, as that means Boston. It is provided that nominations by the governor shall be made at least seven days before appointment, so that we may have time to protest against an infamous candidate, which has not been the case in the past. The salary is a very proper one, for the work will take much time, is of a high order, and should be well rewarded.

On being notified that there is in his county the dead body of a person supposed to have died by violence, the examiner shall take charge of the body, and if an examination appears necessary to him he shall, after being duly authorized by the city or town, make an autopsy in the presence of two or more persons; if he be of the opinion that the death was by violence, he shall file a copy of his autopsy in court, and the courts shall order an inquest, which shall be private if necessary; the justice shall draw up a report, with full details of the inquest, and file it in the records of the county superior court, and may bind over witnesses to appear and testify; the justice is authorized to issue warrants for the arrest of the suspected party or parties. The examiners, however, are not to be able to stop investigation, for if the district attorney or attorney-general should not agree with his report these legal officers may order an inquest. The medical examiner may call in a chemist to aid in the examination of the body or of substances supposed to have caused or contributed to the death. The fee for the chemist is not to exceed thirty dollars. This is perhaps enough for most cases, but we think it should be possible to increase it to fifty dollars for difficult ones, as it is desirable to have the examiner assisted by the best chemical authority. The clerk is to receive two dollars a day.

The medical examiners are to give bonds for five thousand dollars instead of five hundred as at present, and are to take charge of the personal property that is found on or near the body. This is to be delivered to those entitled to it, but, if it is not claimed within sixty days, then to a public administrator to be administered according to law. If he shall neglect or refuse to do this within three days after a due demand he shall be punished by imprisonment in the jail or house of correction not exceeding two years, or by a fine not exceeding five hundred dollars. We strongly suspect that at least one coroner is thankful that the last section is not now in force. Medical examiners are to hold office for seven years, but shall be liable to removal from office at any time by the governor and council for cause shown. This bill is to take effect on July 1, 1877.

Further consideration will possibly show other points besides the one we have mentioned in which the bill might be improved, but as a whole it is excellent, and reflects great credit on its framers. The law unites with medicine in condemning the antiquated coroner system, and there is every reason to hope that the legislature will follow the suggestions of the committee. Our community is now the worst coroner-ridden in the world; it will be no small merit to be the first to throw off the disgrace.

MEDICAL NOTES.

— Dr. Zöller, says the *Medical Examiner*, proposes a new antiseptic in the form of bisulphide of carbon in a state of vapor. Two or three drops allowed to evaporate spontaneously in a closed vessel are sufficient to form an antiseptic atmosphere in which meat, fish, vegetables, and fruit may be kept perfectly fresh for several weeks. When first uncovered the articles smell strongly of the bisulphide, but a short exposure to the air effectually rids them of the slightest odor or taste. Dr. Zöller also describes the antiseptive properties of xanthate of potash, a salt obtained by the action of fused caustic potash on a mixture of bisulphide of carbon and potash. Dr. Zöller, in a paper which he read before the Berlin Chemical Society on the 29th of January last, stated that a small quantity of this salt is sufficient to prevent decay and fermentation in organic bodies for an indefinite period. If made in large quantities the salt could be manufactured very cheaply. It has the further advantage of being devoid of dangerous properties.

— The Board of Education for the city of New York has entered a protest against a bill which has been introduced into the state senate for the creation of the office of sanitary inspector of schools, "it being unnecessary and uncalled for by the public interests or welfare of the public schools." *The Medical Record*, in commenting on the action of the board in terms of severe condemnation, says that the only reasonable way to explain its course is to consider it an impudent defiance of public and professional opinion, and it further assures Senator Gerard, the author of the bill, that he will be sustained in its advocacy by popular and professional sentiment, not only in New York city but throughout the State.

— In referring to a notice of the "two terms in nine months" medical colleges which thrive in Louisville, Nashville, and New Albany, an English exchange remarks: "This statement, and others frequently quoted to similar effect in our columns, ought to make licensing bodies cautious of recognizing any certificates or other guarantees of medical education which have the fragrance of America upon them."

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BOSTON DISPENSARY.

GYNÆCOLOGICAL CASES OF W. H. BAKER, M. D.

[REPORTED BY U. H. HOLBROOK.]

CASE I. *Rectocele and Cystocele dependent upon the Sundering of the Union of the Perineal Muscles.* — M. W., Irish, age forty, married, had always been engaged in housework. Her general health had never been of the best, and treatment was sought on several occasions for disorders of the stomach and liver.

Menstruation began at fourteen, and had been regular ever since, the amount and character of the flow appearing to have been normal. Between the menstrual epochs there had been leucorrhœa, varying in amount, and often having the appearance of boiled starch. She had given birth to twenty children. Every labor had been difficult and protracted, and in four of them recourse was had to the use of forceps. In each of these four cases the child died during or immediately after birth. The patient dated her present trouble with the genital organs from the birth of her eighteenth child. After a tedious and difficult labor, ending by natural means and followed by long exhaustion, she was certain that the parts did not regain their normal condition. A feeling of laxity and falling down was experienced in the pelvic cavity, accompanied by slight constipation and painful micturition. During the two subsequent pregnancies the sensation of sinking was relieved by supporting the gravid uterus with a bandage about the abdomen. Her last labor was four years ago. Since that time her general health has declined; pain and weakness in the loins has been pretty constant, while constipation, painful micturition, and leucorrhœa have been aggravated. No treatment had been sought by her for the pelvic trouble before applying at the dispensary.

On examination there appeared at the vaginal orifice a portion of both the anterior and posterior vaginal walls, which upon the least straining effort of the patient, or upon her taking the upright position, protruded from the vulva and appeared about the size of a small hen's egg. The mucous surface of the perinæum and of the vagina had not been torn, but with one finger in the rectum and one in the vagina it became evident that no perineal body (so called) existed, for the sphincter muscle, and the rectal and vaginal mucous membranes were apparently the only interposing structures. The uterus was low down in the pelvis, in fact resting upon its floor, although its long axis had not changed from the normal position. Dr. Baker thought that the frequent and prolonged labors had occasioned the sundering of the union of the perineal muscles, which in its turn had prevented the proper involution of the vagina, which resulted in the formation of the rectocele and cystocele, and that by thus weakening the strength of the vagina one natural and important support of the uterus was removed, which put the whole weight of that organ upon the ligaments above, and these, sooner or later giving way, must allow the uterus to become prolapsed.

She was recommended to enter a hospital for operations for the removal of the excess of tissue of the anterior and posterior vaginal walls and the restoration of the perineal body.

CASE II. *Complete Procidentia.* — N. A., American, aged twenty-seven, was married at eighteen, and had borne two children. Menstruation began at fifteen, and until the birth of her second child was regular, attended with slight dysmenorrhœa before the flow was fairly established, was characterized by a normal amount, and was of natural duration. Her two labors were quite rapid and painless, notwithstanding the children were above the average size at birth. On each occasion she began her usual housework nine days after the termination of the labor. Six months after the second confinement she began to complain of pains in the back and right groin, often shooting down into the right thigh. The regularly recurring menstrual periods were then attended with increased dysmenorrhœa and a greater amount of flow. A constant feeling of weight in the abdomen was present, and was much increased by such exertions as lifting, running up stairs, etc. Self-examination showed a constantly increasing protrusion at the vulva. Leucorrhœa had been abundant at times. The bowels were constipated, and a desire to empty the bladder had to be gratified every hour. With all these symptoms there had been a gradual deterioration in her general health, and her condition now was one of considerable weakness, attended by sharp pains in the epigastric, lumbar, and hypogastric regions, generally preceded by a shivering sensation, and occurring both night and day.

An examination showed complete procidentia. The cervix had been torn on the left side quite down to the vaginal junction, and was enlarged to about two and one half times its natural size; the lips were everted and very much hypertrophied. The probe entered the cavity of the uterus three and three fourths inches in the direction of the axis of the outlet.

Portions of the bladder and rectum were turned out with the vagina, as indicated by the passage of the probe into the bladder, which turned directly into the upper portion of the protruding mass, and the finger in the rectum, which passed into the lower portion of the same. The meatus urinarius was turned quite out of position, and directed toward the clitoris. The whole diameter of the protruding mass of uterus, bladder, and rectum was five and one half inches antero-posteriorly, and two and three fourths inches transversely. The whole mucous membrane of the vagina was very much thickened and dried, giving to the touch much the sensation of parchment. This membrane, however, was nowhere excoriated.

On replacing the mass within the pelvis, the mucous membrane of the perinæum was found intact, but the union of the perineal muscles had been sundered.

Dr. Baker remarked that the case well illustrated the effects of laceration of the cervix and the sundering of the perineal muscles, in so far interfering with the proper involution of the uterus and vagina that as a result we had not only greatly increased weight in the uterus on the one hand, but a very insufficient support from the vagina on the other.

A common inflated rubber pessary was introduced to keep the parts within the pelvis until the operations could be performed to give a more permanent relief. This form of pessary was used because the entire constrictive power of the vagina had gone, and any of the other and better forms of supports, which are dependent upon this muscular tone for their proper action, would be useless in this case; and therefore one like the above was necessary, which by so stretching the vagina within the pelvis would prevent a return of the procidentia.

CASE III. *Arrest of Sexual Development.* — B. H. was born in Ireland, and emigrated to America six years ago; is nineteen years old, unmarried, and of slender physique. She is one of eleven children, and, apart from her own condition, the family history shows no serious constitutional disturbance. When seven years old she sustained a severe fall, resulting in a deformity of the chest. As nearly as could be ascertained, she was a healthy child until the usual age of puberty. At this time the catamenia did not make their appearance, nor has she ever had any discharge of any character from the vagina.

Without being as strong and active as her companions, she has not complained of any serious difficulty. For the last four years she has noticed cough and tightness in the chest at times, with some mucous expectoration. With a fair degree of regularity in each succeeding month she has felt slight pains in the back, often in the knees, always accompanied by an aggravation of the cough and feeling of constriction in the chest. She applied at the dispensary for treatment for the cough and the amenorrhœa.

A physical examination of the chest showed an irregular outline, the result of the fall in childhood. No more serious affection than bronchitis was evident on percussion and auscultation.

The mammæ showed a remarkable want of development, being merely rudimentary in structure.

The external genital organs were not very well developed, and there was very little hair covering the vulva.

The examination of the internal parts showed a vagina of fair size and length; the uterus high in the pelvis, and both its cervix and body very much diminished in size, although its long axis was quite normal. The probe entered one and three fourths inches into its cavity.

Dr. Baker called attention to one very interesting feature in the case, which was the fact that the vagina here was the only part which seemed sufficiently developed, whereas usually in this class of cases this canal is very short and diminutive.

The treatment advised was improvement of general health by tonics and more out-of-door exercise, and, as a more direct local stimulus to the uterus, the application of galvanism, sponge tents, and the frequent passage of the sound.

LETTER FROM PHILADELPHIA.

Messrs. Editors, — To introduce into the medical world the modern practice of "interviewing" would be a decided innovation. Moreover, medical men, living as they do in glass houses erected by the code of ethics, would hardly submit to it as do individuals out of the profession, after the too common fashion nowadays. Even in a medical publication the report of an interview with a physician, in the shape of brief question and verbose reply, would have a terribly "quacky" look. Many a long breath would be drawn by readers of such a report, and their opinions, every sentence of them, would be punctuated with at least four exclamation points.

In offering you the following communication, then, let me disclaim on the part of my friend, Dr. Goodell, any request or proposition to this end. In reading the report of the proceedings of the Obstetrical Society of Boston, which appeared in the Journal for January 11th, I remarked the adverse criticisms upon Dr. Goodell's manner of applying forceps to the fœtal head when above the brim of the pelvis. A desire to inform myself as to the *modus operandi* which Dr. Goodell adopts in such cases, in order to apply the forceps to the sides of the head without being governed by its site and position, led me to question him in reference to the matter Moreover, I felt that to offer him an opportunity to make his procedure clear would be a just courtesy. Accordingly, I addressed a note to Dr. Goodell, and his reply, which I have his kind permission to embody in my letter, was as follows: —

"Since the times of Baudelocque, Capuron, and Gardien, the application of the forceps to the sides of the child's head at the brim has been practiced by Philadelphia physicians alone. I myself have hitherto warmly advocated it. But for reasons which will appear in my paper read before the International Medical Congress, I now doubt whether, apart from compressing the head in its least vulnerable diameter and from securing a firm grip, it possesses any advantages over the other modes of application, or whether, indeed, it equals them in extractive efficiency. As to the feasibility of making such an application at the brim with the Hodge or the Davis forceps there can be no question. For I myself have made it over and over again, and have seen others make it. This application is indeed more easy to make at the brim than when the head has entered the bony canal and has begun to rotate anteriorly. Supposing that at the brim of a simple flat pelvis the occiput looks directly to the left ilium, — and this is the most common position in such a pelvis, — the mode of applying the blades of the forceps in the conjugate diameter of the brim and over the biparietal diameter of the head would be as follows: —

"The woman being on her back and with her hips over the edge of the bed, the right (female) blade is first entered in the right side of the pelvis, with its convex surface looking obliquely to the sacrum. By rapid depression and spiral twist of the handle, together with upward pressure on its convex edge by the fingers within the vagina, it is rotated very nearly half a circle over the forehead to the side of the child's head, under the pubes. The left (male) blade, held loosely in the right hand by its convex edge, with its handle hanging downward, is now introduced in the *right* side also of the pelvis, over the left temple of the child's head, but under the shank of the other blade. By raising now the handle and gently pushing up this blade, it will slip up over the sacral side of the head. When locked, the long forceps thus applied in the conjugate virtually become a straight instrument in so far as their relation to the pelvic curve is concerned. The lock will press firmly on the left tuberosity of the ischium, and the handles look backward in a line very nearly at right angles to the mother's body. Traction is then made in a straight line in the direction of the handles by leaning, as it were, on the hands, the left placed on the lock and the right on the handles. When the head has passed the brim and has begun to rotate anteriorly, the forceps act no longer as a straight instrument. The traction power is therefore exerted more by pushing the lock backward and downward with the left hand than by traction on the handles with the right. A compound power is thus obtained which forces the head away from the pubes, and compels it to hug the sacrum in its descent and follow the line of pelvic curvature. When the occiput looks to the right ilium, both blades are introduced in precisely the same manner, but now in the *left* side of the pelvis, the left (male) blade taking precedence."

Dr. Goodell's statement could not be more clearly put.

A few weeks ago a young man who had recently lost his wife, and was in consequence greatly depressed in mind, went into one of our leading drug stores and asked for seventy-five cents' worth of laudanum. The clerk who served him asked why he desired so large a quantity, and the man merely said, "We use it often in my family, and I wish to save myself trouble." The clerk bottled the laudanum (quantity, four ounces) and sold it to this man, who upon reaching home at once swallowed three ounces of the tincture. By the time the physician had reached him the patient was in a collapse. Everything which under the circumstances could be done was done, but in vain. At the coroner's inquest the sister of the deceased testified that her brother was under the influence of whiskey at the time of the purchase of the poison. The mother also had thus informed the physician. This was, however, firmly denied by the apothecary's clerk, who swore his customer was sober. Unfortunately for the clerk this was the *third* time within ten days that the coroner had been called upon to hold inquest because of the free sale of laudanum. He therefore determined to make this a test case, and put the clerk, who had been accused of criminal carelessness by the coroner's jury, under parol to appear in court when summoned. The clerk will be tried on a charge of homicide, and the case comes off next week. The object of Dr. Goddard, the coroner, is to bring about such change in the law of this State in reference to the sale of poisons as will make it include laudanum. At present it includes the poisonous alkaloids, arsenic, prussic acid, and the like, but does not mention the tincture of opium.

It is a perfectly easy matter for anybody to purchase laudanum by the pint from apothecaries in this city. If the customer says "My horse is lame, I want the laudanum for his leg," "My back is lame," "My wife has sprained her ankle," the average apothecary will at once sell the required quantity. This is a crying evil, and I am heartily glad the coroner has determined to bring it to the notice of the courts. The said clerk will probably be discharged with a reprimand, for in a general sense he has not offended against the law. But the result will probably be, and ought to be, an amendment of the now loosely constructed law.

Within the week a young woman sent her brother to an apothecary shop for a dose of castor-oil for herself, with the request that something should be added which would make the oil palatable. This the apothecary did with a vengeance, for he is now in jail on charge of having caused the death of the young woman by carelessly mixing *muriatic acid* with the castor-oil. The girl suffered intensely, and in spite of skillful treatment died within twenty-four hours. The inquest showed that this apothecary kept his poisonous medicines in a most reckless, helter-skelter manner among those in common use.

This outrageous carelessness leads to the suggestion that it would be well if every city appointed an inspector of pharmacies. His duty should be to see that all apothecaries kept their poisons in a distinctly separate place. If upon entering a shop he found bottles of poisons misplaced, the apothecary should be subjected to a fine. If dispensers of medicines had poison-shelves or a poison-cabinet, even a clerk could not commit the blunder of taking a poison while reaching for something else. Whenever an employé or the apothecary himself approached the poison-cabinet, unless he were unfit for his place, he would inevitably make the mental remark, "You are going to the poisons. Be careful!" By such a provision the fatal errors which are so common in compounding prescriptions would be averted.

At the sixteenth annual meeting of the Philadelphia Drug Exchange, held some weeks ago, the board discussed the draft of a law which had been proposed by medical gentlemen of this city to the effect that druggists and dealers in medicines of all kinds should be prevented from rendering aid or giving advice to those who should apply to them for relief, under penalty of fine and imprisonment. The board gave such reasons against the passage of the bill to the governor and others of the legislature, and used such powerful influence, including efforts made by the Philadelphia College of Pharmacy, that unfortunately the bill was defeated.

In the report of the Pharmaceutical Examining Board of Philadelphia for 1876 it is mentioned that out of forty clerks who applied for examination as "qualified assistants," twenty-three were rejected as not possessing the requisite knowledge for taking temporary charge of a retail drug store. Out of eleven applicants for examination as to qualifications necessary in acting as proprietors of drug stores only three were found to be qualified.

The students in the various medical schools of this city are just now in the throes of final examination, and the public presentation of diplomas will soon follow.

The ceremony of endowing the John Welch professorship in the University of Pennsylvania recently took place. Lengthy addresses were made by Provost Stillé, Hon. Morton McMichael, and others, in which Mr. Welch received the full meed of praise, not only for his remarkable services in establishing the success of the Centennial Exhibition, but also for his noble transfer of the testimonial, given him by the citizens, to the university in the form of the endowment of a chair of history and English literature, to be called the

John Welch Centennial Professorship. Mr. Welch made an eloquent and modest response.

In my recent description of the Jefferson College Hospital I should have mentioned a steam closet, which will be devoted to the purification of the body and bed clothing. It is located in the cellar.

Some of us have this week been newly taught a lesson not to be easily forgotten. I was one of the victims. A colored man came to my office with the request that I would visit a lady who was ill. I agreed to go at a certain hour. At that hour I was detained by office patients. The man came again to request me to hasten. I went soon after to the house to which he had directed me. No such lady as the man had named was known at this house, and I learned that I was the fourth physician who had called upon a similar errand.

Returning to my office in the frame of mind common to dyspeptics, I was told that shortly after I went out the man had come a third time, saying that he had met me, and that I had sent him to my office to await my return which would be in half an hour. The servant, deceived by his plausible manner, admitted him. His stay was very brief. He took property to the value of three hundred and fifty dollars. I went at once to our detective police, described the property, and the officers vindicated the high reputation of Mayor Stokeley's police system by placing three hundred dollars' worth of the stolen articles in my possession within *fifteen hours*. The thief had made use of a pawnbroker, in whose shop the recovered property was found. Other physicians have been likewise victimized, but to what extent I do not know. This is a common form of thieving in Philadelphia, so that the stringent rule of doctors' houses is that not a soul — even though he be a bishop — shall be admitted to the office during the absence of the physician, unless the servant keep guard.

H. O.

PHILADELPHIA, *March* 8, 1877.

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COMPARATIVE MORTALITY-RATES FOR THE WEEK ENDING MARCH 31, 1877.

	Estimated Population, July 1, 1877.	Total Mortality for the Week.	Annual Death-Rate per 1000 for the Week.	Death-Rate for the Year 1876.
New York	1,077,228	442	21.34	27.46
Philadelphia	850,856	324	19.68	22.88
Brooklyn	527,830	199	19.60	24.31
Chicago	420,000	127	15.72	20.41
Boston	363,940	143	20.43	23.39
Providence	103,000	35	17.67	18.34
Worcester	52,977	17	16.69	22.00
Lowell	53,678	24	23.25	22.21
Cambridge	51,572	23	23.19	20.54
Fall River	50,370	21	21.68	22.04
Lawrence	37,626	13	17.97	23.32
Lynn	34,524	22	33.14	21.37
Springfield	32,976	7	11.04	19.69
Salem	26,739	10	19.45	23.57

Summary for March. — The public health of the foregoing cities was not in such a satisfactory condition during March as it was in February, if we may judge by the death-rates; the inclement weather of March was probably one important factor in producing an increased mortality.

In New York, the deaths were mostly caused by phthisis, pneumonia, and bronchitis; diphtheria and croup were more fatal than in February; scarlatina has steadily diminished since January.

In Philadelphia, the chief causes of death were phthisis, pneumonia, bronchitis, diphtheria, small-pox, croup, typhoid fever, scarlatina, — all of them more fatal than in February.

In Brooklyn, the mortality from the seven chief zymotic diseases was nearly the same as in February. Diphtheria and croup have increased considerably. Scarlatina is less. The relative order of prevalent diseases is as follows: phthisis, diphtheria (and croup), pneumonia, scarlatina, bronchitis.

In Chicago, scarlatina heads the list, but it is declining.

In Boston, scarlatina remains very near the low place in the list which it reached in February. Diphtheria and croup are the same as in January and February, considerably in excess of scarlet fever. Small-pox is absent, and there was only a single death from measles. Phthisis, pneumonia, and bronchitis are the same as in February.

In Providence, the death-rate for the month was only 16.3 per 1000 of the population. The mortality was chiefly from diseases of the respiratory system. Diphtheria also was more fatal than in February.

In Massachusetts cities, other than Boston, phthisis, diphtheria (and croup), and pneumonia were the chief causes of death. Scarlatina has subsided.

Resolutions of the Faculty of the Harvard Medical School on the Death of Professor Buckingham. — In taking official notice of the decease of their late colleague, Dr. Charles Edward Buckingham, the medical faculty desire to express their high estimate of his character and abilities, and their sense of the loss which the university has sustained by the death of a high-minded, conscientious, and greatly esteemed teacher.

They would respectfully offer to Dr. Buckingham's family their sincere sympathy with them in the bereavement which has taken from them an affectionate husband and father.

For the faculty,
F. Minot.
O. W. Holmes.

Boston Society for Medical Observation. — At a regular meeting of the society, to be held on Monday evening next, at eight o'clock, at its rooms, 36 Temple Place, Dr. C. E. Inches will report a Case of Paralysis, and Dr. T. B. Curtis will read a paper on the Metric System.

The second annual meeting of the American Gynæcological Society will be held in Boston on May 30, 31, and June 1, 1877. The following titles of papers that are in preparation have already been received: —

Second Annual Address on Medical Gynæcology, by the President, Fordyce Barker, M. D.
Is there a Proper Field for Battey's Operation? by Robert Battey, M. D.
The Intra-Uterine Treatment of Flexions, by Ely Van de Warker, M. D.
Etherization in Childbirth, by W. T. Lusk, M. D.
Dilatation of the Cervix Uteri for the Arrest of Hæmorrhage, by G. H. Lyman, M. D.
The Corpus Luteum, by J. C. Dalton, M. D., of New York.
The Relations of Pregnancy and Phthisis, by W. L. Richardson, M. D.
Vaginal Ovariotomy, by W. Goodell, M. D.
Post-Partum Hæmorrhage. by R. A. F. Penrose, M. D.
A New Theory as to the Functions of the Third Sphincter Ani, by J. R. Chadwick, M. D.

Books and Pamphlets Received. — Micro-Photographs in Histology. By Carl Seiler, M. D. Vol. I. No. 8. Philadelphia: J. H. Coates & Co.

Transactions of the State Medical Society of Nebraska at its Sixth, Seventh, and Eighth Annual Meetings. 1877.

Syphilis and Chancroid. Brief History, Differential Diagnosis, Prophylaxis, and Treatment. By P. H. Bailhache, Surgeon United States Marine Hospital Service. (Reprinted from the Annual Reports of the Supervising Surgeon-General for 1875.)

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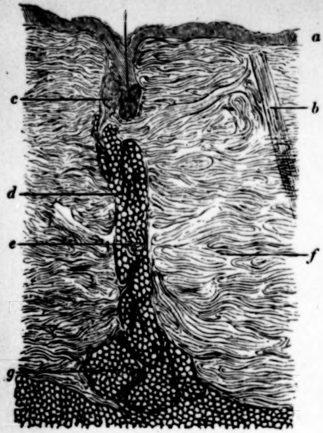

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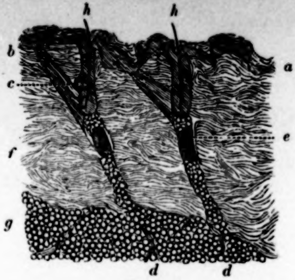

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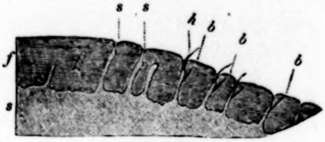

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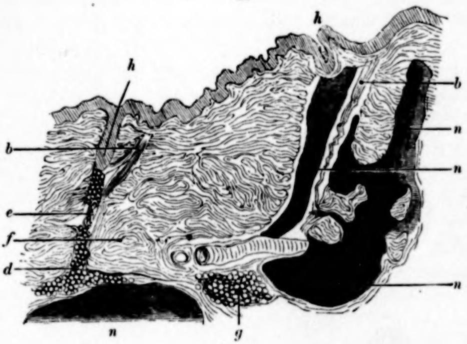

EXPLANATION OF FIGURES.

Figure **1. Section of skin from back of an adult, showing fat canal and lanugo hair, magnified 10 diameters.**

" 2. Section of skin from the shoulder of an infant, magnified 17 diameters.

" 3. Fragment of skin adherent to a round-cell sarcoma of the subcutaneous connective tissue of the back, natural size.

" 4. Section of the skin of an infant invaded by a rapidly spreading nævus, magnified 17 diameters.

- *a.* **Epidermis.**
- *b.* **Erector pili muscle.**
- *c.* **Sebaceous gland.**
- *d.* **Fat canal.**
- *e.* **Sudoriparous gland.**
- *f.* **Cutis vera.**
- *g.* **Adipose tissue.**
- *h.* **Hair.**
- *n.* **Nævus.**
- *s.* **Sarcoma.**